

PART 127—CONSTRUCTION AND ARRANGEMENTS

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Subpart A—Plan Approval

§ 127.100 General.

Plans listed by § 127.110 of this subpart must be submitted for approval after the owner or builder applies for inspection in compliance with § 126.320 of this subchapter.

§ 127.110 Plans and specifications required for new construction.

Each applicant for approval of plans and for an original Certificate of Inspection shall submit three copies of the following:

(a) *General*. (1) Specifications (information only).

(2) General Arrangement Plans.

(3) Safety Plan (Fire-Control Plan), for OCMI review and approval.

(b) *Hull structure*. (1) Midship Section.

(2) Booklet of Scantling Plans.

(c) *Subdivision and stability*. [For plans required for subdivision and stability, see subchapter S of this chapter.]

(d) *Marine engineering*. (1) Piping diagrams of each Class I systems.

(2) Piping diagrams of the following Class II systems (the builder's certification of Class II non-vital piping systems must accompany the piping diagrams in compliance with § 128.220(c) of this subchapter):

(i) Systems for fill, transfer, and service of fuel oil.

(ii) Fire-main and fixed gaseous fire-extinguishing systems.

(iii) Bilge systems.

(iv) Ballast systems.

(v) Fluid-driven power and control systems.

(vi) Through-hull penetrations and shell connections.

(vii) Sanitary systems.

(viii) Vents, sounding tubes, and overflows.

(ix) Compressed-air systems.

(3) Steering and steering-control systems.

(4) Propulsion and propulsion-control systems.

(5) Piping diagrams of each system containing any flammable, combustible, or hazardous liquid including—

(i) Cargo-oil systems;

(ii) Systems for combustible drilling-fluid (such as oil-based liquid mud); and

(iii) Cargo-transfer systems for fixed independent or portable tanks.

(e) *Electrical engineering*. (1) For each vessel of less than 100 gross tons, the following plans must be submitted:

(i) Arrangement of electrical equipment (plan and profile) with equipment identified as necessary to show compliance with this subchapter.

(ii) Electrical one-line diagram that includes wire types and sizes, overcurrent-device rating and setting, and type of electrical-equipment enclosure (drip-proof, watertight, or the like).

(iii) Switchboard plans required by paragraphs (e) and (f) of § 110.25-1 of this chapter.

(2) For each vessel of 100 or more gross tons, the plans required by § 110.25 of this chapter must be submitted.

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(f) *Automation.* For each vessel of 100 or more gross tons, where automated systems are provided to replace specific personnel in the control and observation of the propulsion systems and machinery spaces, or to reduce the level of crew associated with the engine department, the following plans must be submitted:

(1) Plans necessary to demonstrate compliance with subpart D of part 130 of this subchapter.

(2) Automation-test procedure.

(3) Operations manual.

§ 127.120 Procedure for submittal of plans.

If a vessel is to be constructed, altered, or repaired, the plans, information, and calculations required by this part must be submitted to—

(a) The OCMI in the zone where the vessel is to be constructed, altered, or repaired; or

(b) The Commanding Officer, Marine Safety Center, 400 Seventh Street SW., Washington, DC 20590-0001.

Subpart B—Particular Construction and Arrangements

§ 127.210 Structural standards.

(a) Except as provided by paragraphs (b) and (c) of this section, compliance with the construction and structural rules established by the American Bureau of Shipping and incorporated by reference in § 125.180 is acceptable for the design and construction of an OSV.

(b) The current standards of other recognized classification societies, or any other established current standard, may also be used upon approval by the Commandant (G-MSE).

(c) If no established current standard for design is used, detailed design calculations must be submitted with the plans required by § 127.110 of this part.

(d) The plans required by § 127.110 of this part should specify their standard for design.

§ 127.220 General fire protection.

(a) Each vessel must be designed and constructed to minimize fire hazards, as far as reasonable and practicable.

(b) Exhausts of internal-combustion engines, galley uptakes, and similar sources of ignition must be kept clear

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of and insulated from woodwork and other combustible matter.

(c) Paint lockers and similar compartments must be constructed of steel or be wholly lined with steel.

(d) Except as provided by paragraph (e) of this section, when a compartment containing the emergency source of electric power, or vital components of that source, adjoins a space containing either the ship's service generators or machinery necessary for the operation of the ship's service generators, each common bulkhead and deck must be of "A-60" Class construction as defined by § 72.05-10 of this chapter.

(e) The "A-60" Class construction required by paragraph (d) of this section is unnecessary if the emergency source of electric power is in a ventilated battery locker that—

(1) Is located above the main deck;

(2) Is located in the open; and

(3) Has no boundaries contiguous with other decks or bulkheads.

§ 127.230 Subdivision and stability.

Each vessel must meet the applicable requirements in subchapter S of this chapter.

§ 127.240 Means of escape.

(a) Except as provided by paragraphs (l) and (m) of this section, there must be at least two means of escape, exclusive of windows and portholes, from each of the following spaces:

(1) Each space accessible to offshore workers.

(2) Crew accommodations and each space where the crew may normally be employed.

(b) At least one of the two means of escape must—

(1) Be independent of watertight doors in bulkheads required by part 174 of this chapter to be watertight; and

(2) Lead as directly to the open deck as practicable.

(c) The two means of escape required by paragraph (a) of this section must be widely separated and, if possible, at opposite ends or sides of the space, to minimize the possibility that one incident will block both escapes.

(d) Except as provided by paragraph (e) of this section, a vertical ladder